

Figure 1

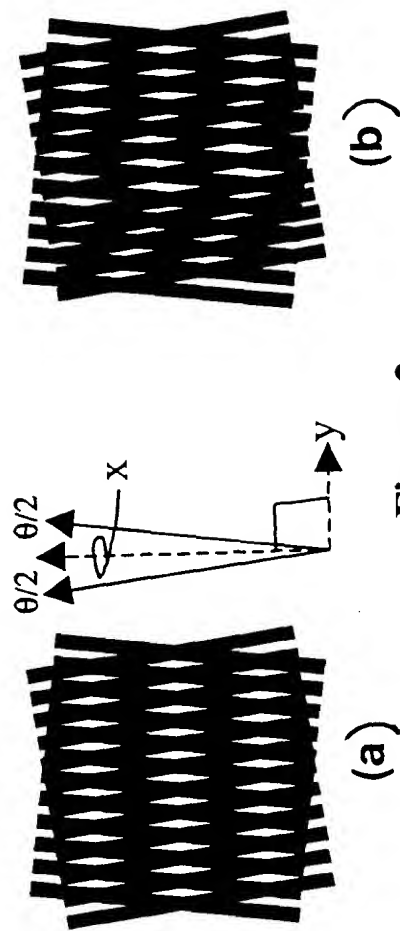
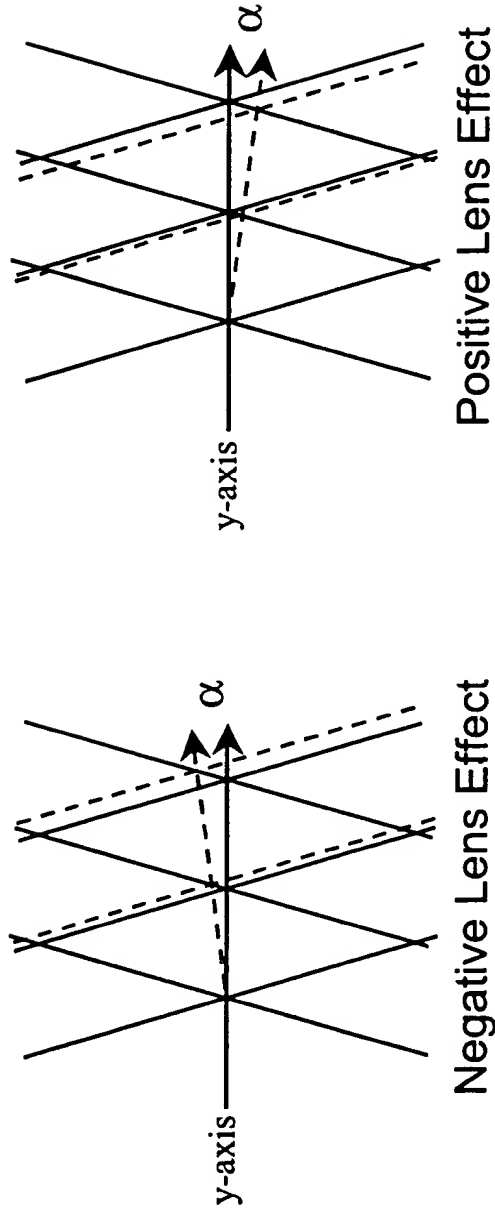


Figure 2



(a)

(b)

Figure 3

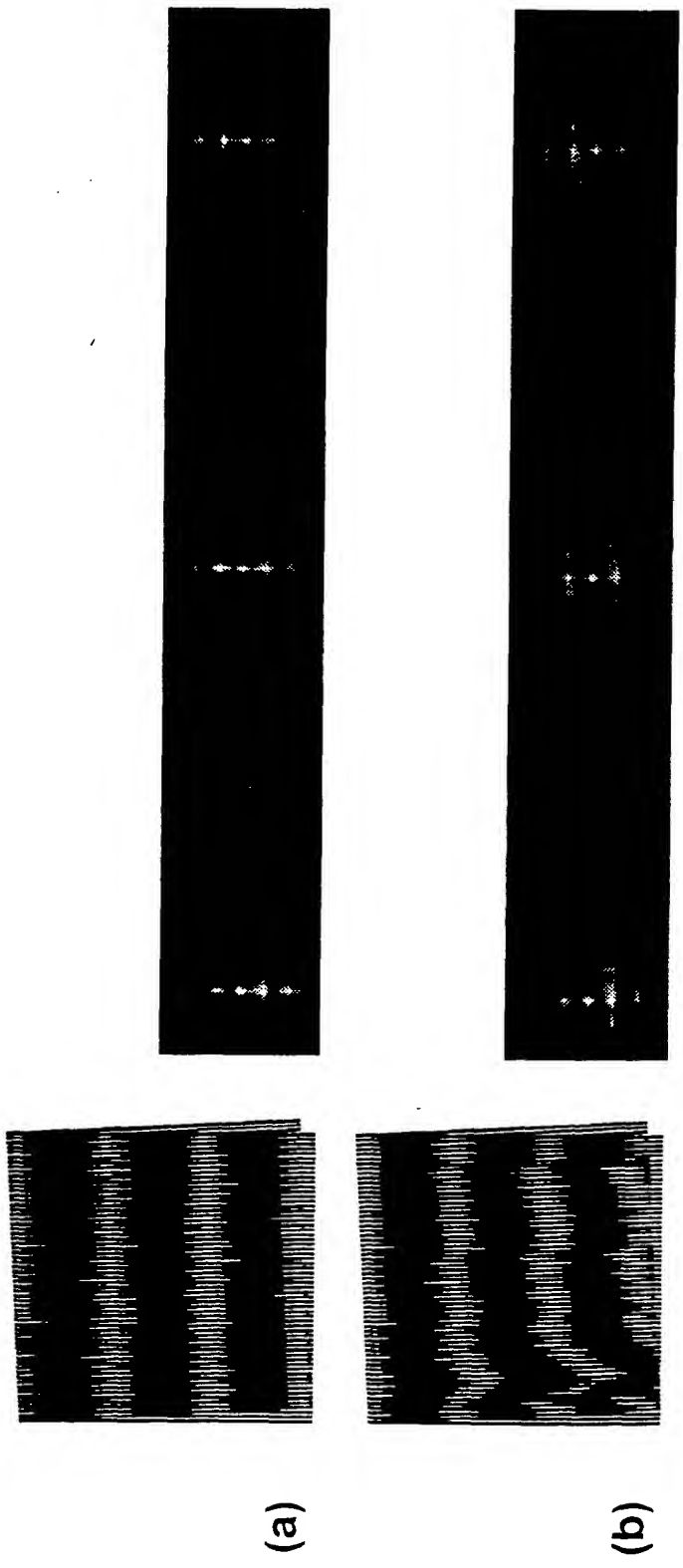


Figure 4

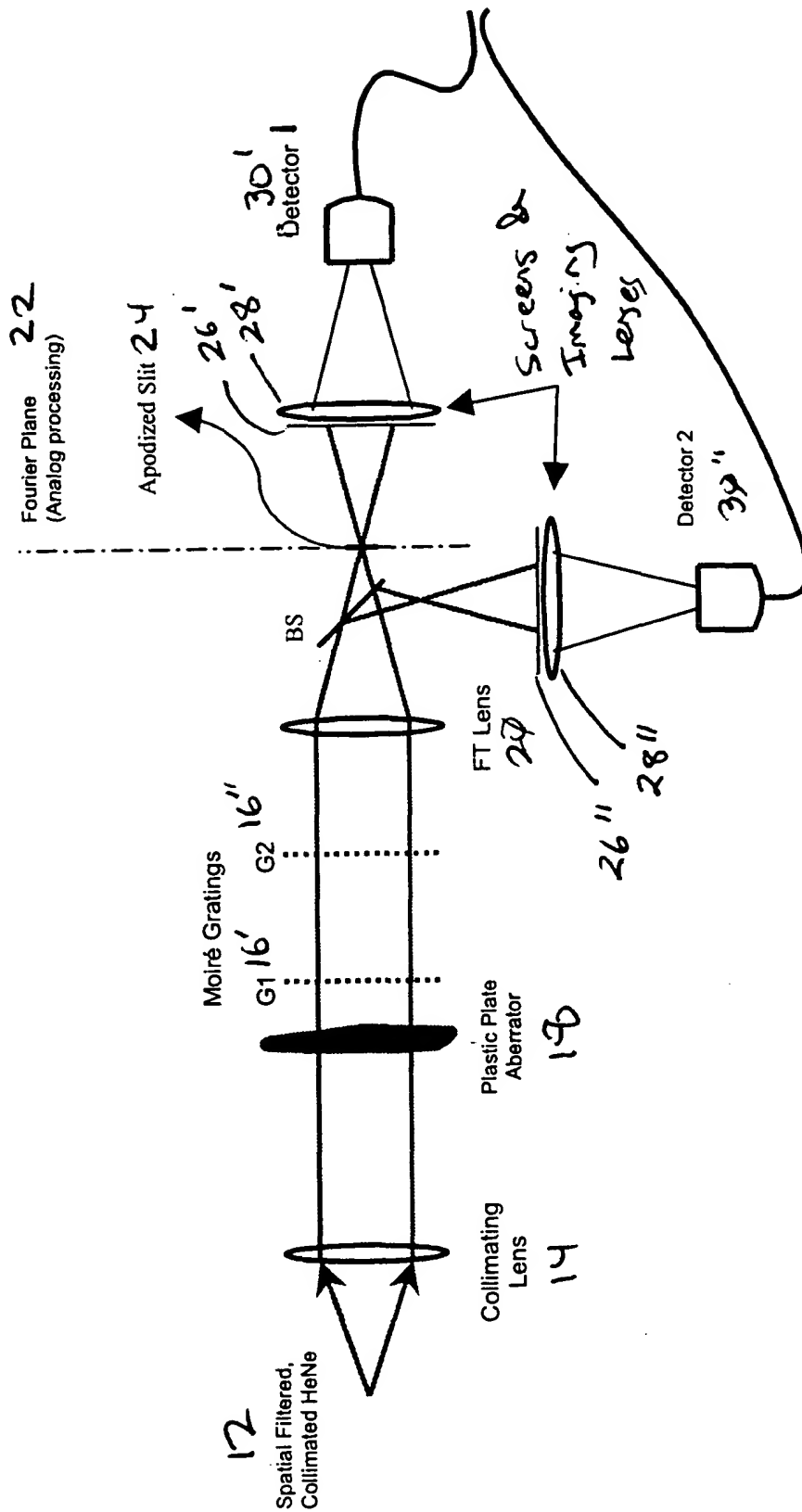


Figure 5

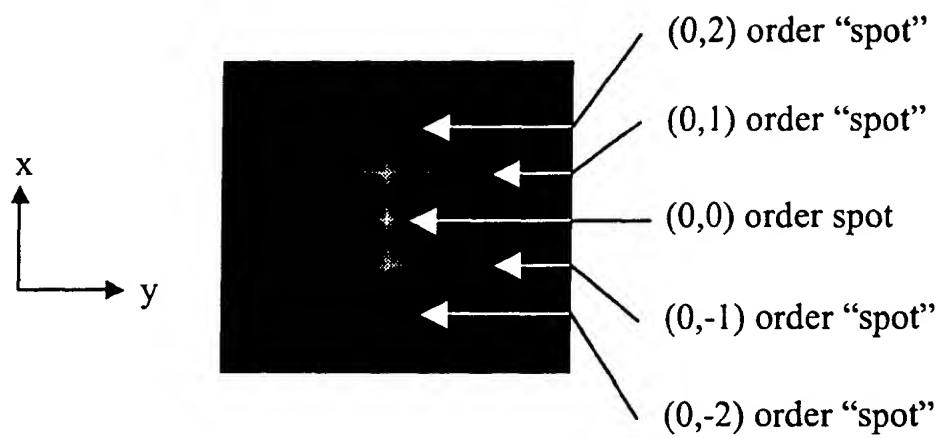


Figure 6

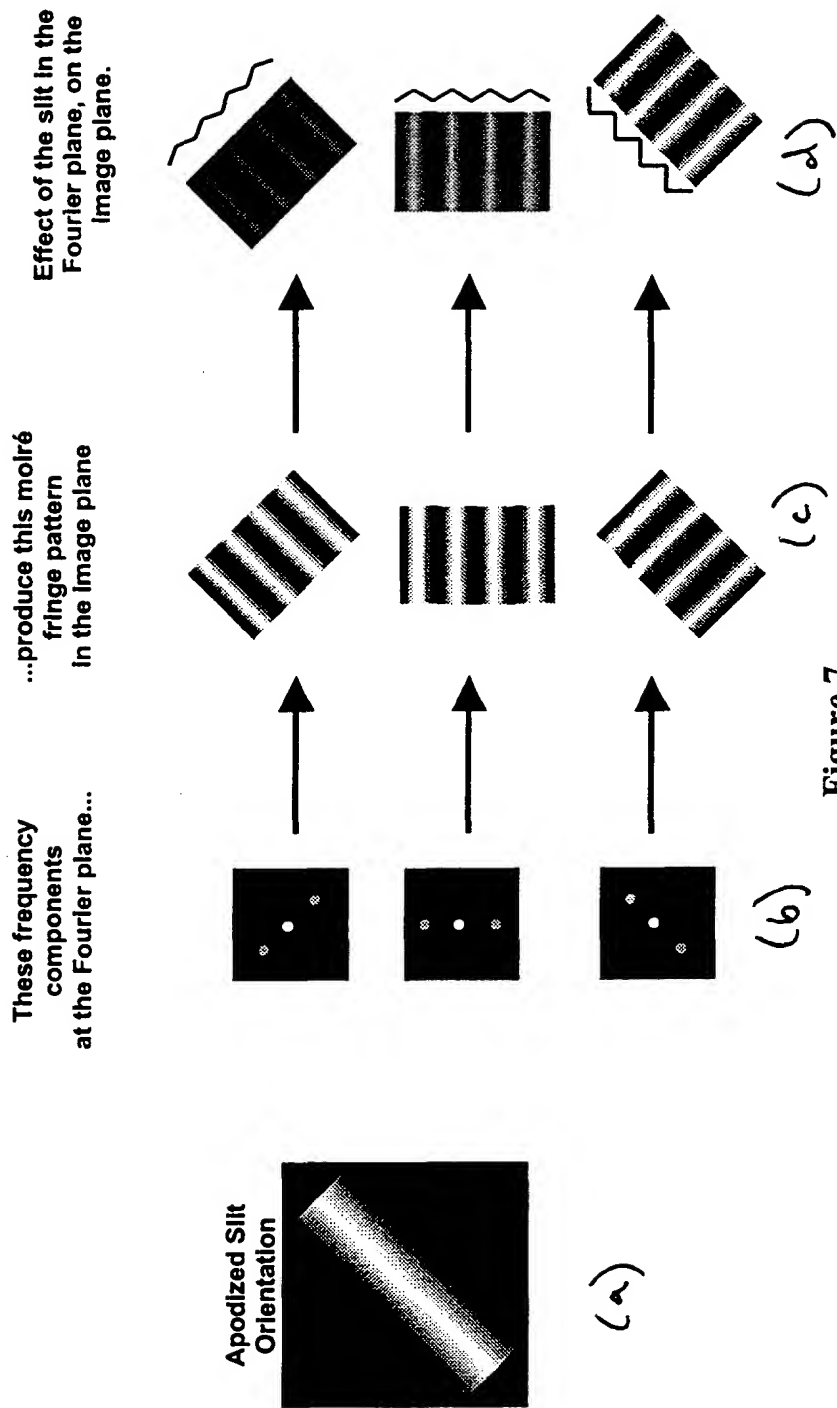
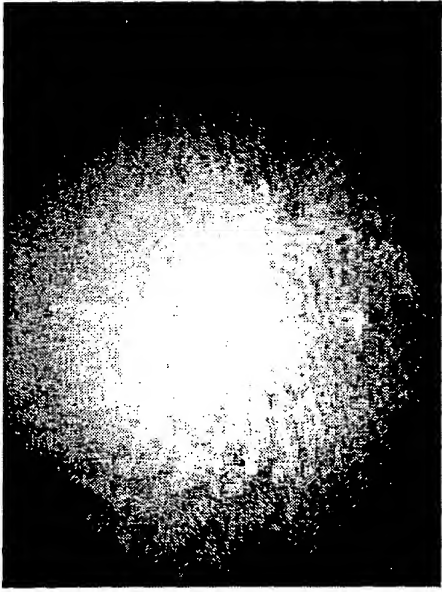


Figure 7

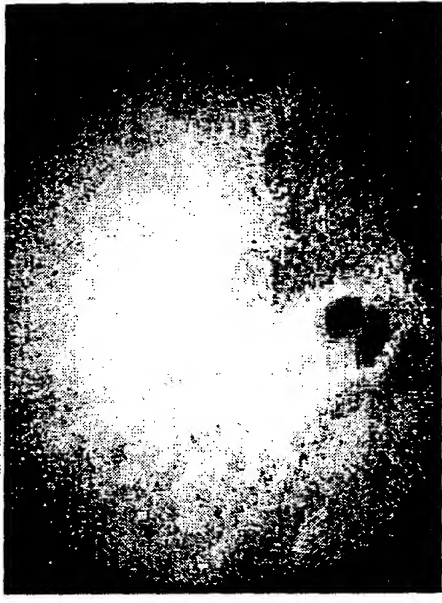
$\frac{1}{2} \left(\frac{\partial u}{\partial x} + \frac{\partial v}{\partial y} \right)$ $\frac{1}{2} \left(\frac{\partial u}{\partial x} - \frac{\partial v}{\partial y} \right)$ $\frac{1}{2} \left(\frac{\partial u}{\partial y} + \frac{\partial v}{\partial x} \right)$ $\frac{1}{2} \left(\frac{\partial u}{\partial y} - \frac{\partial v}{\partial x} \right)$



Moiré Deflectogram - Air Slit

- Camera does not resolve fringes.
- Imperfect gratings cause secondary fringes.

(a)



Moiré Deflectogram Apodized Slit

- Very different intensity pattern.

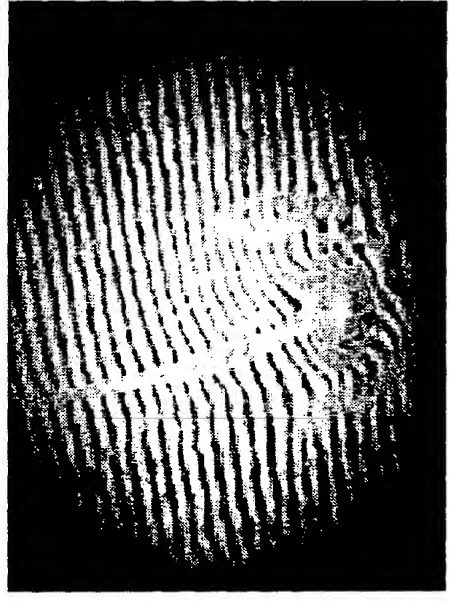
(b)



Normalized Pattern

- All fringe slope information across the profile has equal weighting.
- Proportional to 2nd wavefront derivative.

(c)

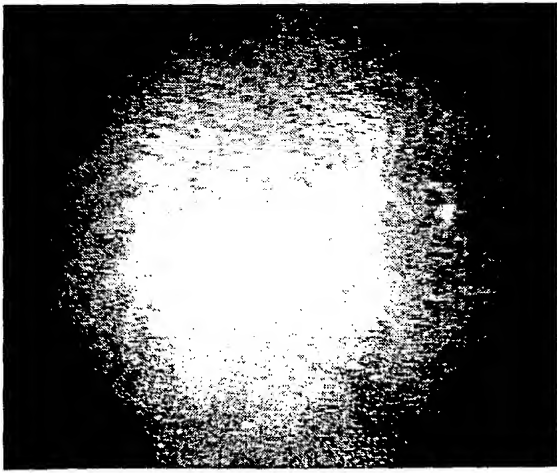


Macroscopic Fringe Deflectogram for Comparison

- Typical deflectogram (camera resolves fringes)

(d)

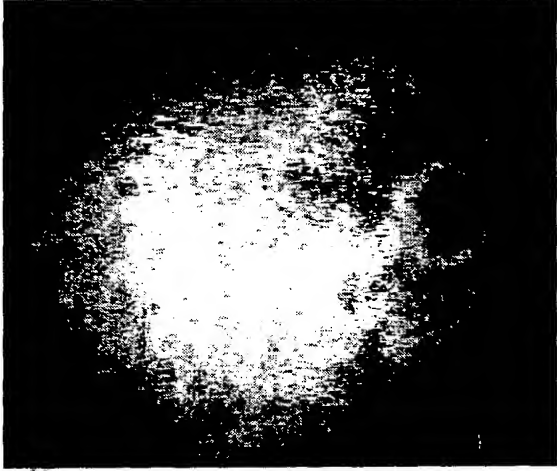
Figure 8



Moiré Deflectogram -- Air Slit

- Camera does not resolve fringes.
- Imperfect gratings cause secondary fringes.

(a)



Moiré Deflectogram -- Apodized Slit

- Very different intensity pattern
- Looks like a 3D surface illuminated from the upper left.

(b)



Normalized Pattern

- All fringe slope information across the profile has equal weighting.

(c)

Figure 9